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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/782,451

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07/10/2009

EXAMINER

BALLINGER, MICHAEL ROBERT

ART UNIT

PAPER NUMBER

3732

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/782,451	Applicant(s) FOSER ET AL.	
	Examiner MICHAEL R. BALLINGER	Art Unit 3732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,9-12,14,16,17,20-22,25,26 and 28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6,9-12,14,16,17,20-22,25,26 and 28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. In acknowledgement of the amendments filed 9 March 2009, claims 1-6, 9-12, 14, 16-17, 20-22, 25-26, and 28 are currently pending.

Claim Objections

2. The claims are objected to because the lines are crowded too closely together, making reading difficult. Substitute claims with lines one and one-half or double spaced on good quality paper are required. See 37 CFR 1.52(b).

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-6, 9-12, 14, 16-17, 20-22, 25-26, and 28 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

5. The Examiner notes, both claims 1 and 20 recite the transitional phrases "consisting of" and "consisting of the steps of". The transitional phrase "consisting of" excludes any element, step, or ingredient not specified in the claim. *In re Gray*, F.2d 520, 11 USPQ 255 (CCPA 1931). In the context of new matter issues, the Examiner submits, the specification as originally filed fails to adequately describe the subject matter of claim 1 or 20. Specifically, the Examiner notes the original disclosure describes a "further interconnecting material 36 is provided between the

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tooth stump 12 and the base structure 16" (see e.g., page 8, lines 20-21 and 27-31). Page 4, lines 6-13 describe the second interconnecting material is an integral and essential part of the disclosed invention. Therefore, the specification does not adequately describe the claimed invention "consisting of" only those elements and steps recited. Moreover, the original disclosure is void an adequate description of a dental restoration and method including **only** those elements and steps recited in claims 1 and 20. If Applicant believes a single embodiment in the specification describes only those elements and steps as claimed, the Examiner will reevaluate the issue of new matter in this context upon citation and discuss of specific portions or sections of the original disclosure.

6. Additionally, claim 1 and 20 as currently amended recite the limitations "the interconnecting material being only one layer" and "an elastic single layer interconnecting material" respectively. The Examiner notes, no where in the original disclosure is an elastic **single layer** light polymerizable interconnecting material described.

7. Claim 1 recites the limitation "the interconnecting material being so designed and constructed that a firing of the assembly of the base structure, over structure, and interconnecting material can be omitted". Similarly, claim 20 recites the limitation "the method not requiring a firing of the base structure, interconnecting material and over structure." These, limitations, (i.e., that a firing can be omitted or is not required) are not adequately supported in the original disclosure. The Examiner notes, page 4, lines 12-13 of the specification states "A time-consuming firing of the assembly can be omitted which favorably benefits a reduction of the cycle time in the dental laboratory." Clearly omitting a "time consuming firing" is different than omitting "firing" altogether. Therefore, the original disclosure does not describe "omitting

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firing" or "not requiring firing" in such a way as to reasonably convey to one skilled in the art that the inventor had possession of the claimed invention at the time the application was filed.

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 2, 12, 16, 25 and 28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

10. As noted above, claims 1 and 20 recite the transitional phrase "consisting of" and "consisting of the steps of". A claim which depends from a claim which "consists of" the recited elements or steps cannot add an element or step. Claim 2 which depends from claim 1, recites the limitation "wherein the over structure (24) includes a covering element (40)..." The Examiner notes the transitional phrase "includes" is synonymous with "comprising". See e.g., *Mars Inc. v. H.J. Heinz Co.*, 377 F.3d 1369, 1376, 71 USPQ2d 1837, 1843 (Fed. Cir. 2004). Thus the metes and bounds of claim 2 are indefinite, as it is unclear to the Examiner precisely how the dental restoration **consisting of only** the elements of claim 1 can **further comprise** a covering element. Applicant's use of "consisting of" in claim 1 prohibits the inclusion of additional structural elements in the dependent claims. Similarly, in claim 16, the addition of a "protuberance that simulates a tooth protuberance of a tooth" renders that claim indefinite.

11. Claim 25, dependent on claim 20, recites the limitation "wherein the step of dispensing further comprise evaluating the prospective bite situation which will exist between the base structure (16) and the over structure (24) in their installed position". First the Examiner notes, there is insufficient antecedent basis in the claims for the step of "dispensing". Secondly, it

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appears Applicant is attempting to further limit the step of “dispensing” with the steps of “evaluating” and “manipulating”. As interpreted by the Examiner, the step of “dispensing” or “disposing” is distinct from and in no way inherent of the steps of “evaluating” and “manipulating” as claimed. Therefore, “evaluating” and “manipulating” add additional steps to the method of claim 20, thus rendering the claim indefinite. Similarly with regard to claim 28, the step in which “interconnecting material is removed” is a seemingly distinct method step from the “disposing” of claim 20. Thus claim 28 has also been interpreted to improperly recite additional method steps and render the claim indefinite.

12. Per claim 12, it is unclear to the Examiner how an elastic, light polymerizable interconnecting material can be comprised of a ceramic as claimed. Specifically, it is unclear how a ceramic material can be light polymerizable.

Allowable Subject Matter

13. Claims 1-6, 9-12, 14, 16-17, 20-22, 25-26, and 28 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 1st paragraph and 2nd paragraph, set forth in this Office action.

14. The following is a statement of reasons for the indication of allowable subject matter: None of the prior art of record alone or in combination teaches or renders obvious the limitations of claims 1 and 20. Specifically, claims 1 and 20 recite require the elastic interconnecting material be “only one layer light polymerizable and filling the entire layer defining space between the inner contour of the over structure and the outer contour of the base structure”. As noted in Applicant's remarks dated 9 March 2009, prior art to Braiman fails to explicitly teach a “light polymerizable” interconnecting material. While the coupling element of Fisher has only

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one layer of light polymerizable material (i.e., intermediate layer, 21), this layer **does not** fill the entire layer defining space between the over structure and base structure as claimed. Because of the inclusion of the transitional phrase "consisting of" and "consisting of the steps of" in the independent claims, the required additional saline layer of Fisher renders the claims unobvious. Additionally, the amended claims including the limitation "a firing of the assembly ... can be omitted." The Examiner notes, in the context of the apparatus claims, such a limitation can be construed as a product-by-process limitation. However, for the above mentioned reason the prior art does not teach or render obvious the apparatus of claim 1. In the case of the method claim 20, the additional limitation of the method not requiring a time consuming firing further distinguishes claim 20 from the prior art of record to Braiman which requires a brief firing. The subject matter of dependent claims 2-6, 9-12, 14, 16-17, 21-22, 25-26, and 28 is also allowable for the above reasons which are incorporated through dependency from claims 1 and 20.

Response to Arguments

15. Applicant's arguments, see the remarks, filed 9 March 2009, with respect to the rejection(s) of claim(s) 1 and 20 under 35 U.S.C. 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, the claims stand rejected on a new ground(s) of rejection under 35 U.S.C. 112, 1st and 2nd paragraphs as detailed above.

Conclusion

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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17. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL R. BALLINGER whose telephone number is (571)270-5567. The examiner can normally be reached on Monday-Friday 7:30 A.M to 5:00 P.M. EST.

19. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cris Rodriguez can be reached on (571)272-4964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

20. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

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like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael R Ballinger/
Examiner, Art Unit 3732
7/6/09

/Cris L. Rodriguez/
Supervisory Patent Examiner, Art Unit 3732